

ABSTRACT

A selectable resolution image capture system is provided having an array of photocells connected by a circuit that has a full-resolution and at least one low-resolution mode. The circuit converts electrical responses from the photocells, singly, or in grouped combinations, into digital signals. The circuit operates on both monochrome and color imagers. For monochrome imagers, a quarter-resolution mode is provided that renders the array of photocells into several four-contiguous-photocell blocks, and combines the electrical responses of the photocells of each block together. For color imagers, a quarter-resolution mode is provided that reads four same-colored photocells at a time using a one-step, three-step progression through the rows and columns of the photocell array. An image processor operates the circuit and a user interface permits a user to select between the full-resolution and low-resolution modes of the circuit to capture an image. The user interface includes automatic modes that cause the circuit to capture an image at a low resolution if lighting or power conditions disfavor a full-resolution capture.